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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

OH, TAYLOR V

ART UNIT

PAPER NUMBER

1625

DATE MAILED: 04/24/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/592,254

Applicant(s)

TURRI ET AL.

Examiner

Taylor Victor Oh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17, 18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Applicant's arguments with respect to claims 17-24 have been considered but are moot in view of the new ground(s) of rejection.

The Status of the Claims :

Claims 17-24 are pending.

Claims 17-18, and 20-24 have been rejected.

Claim 19 has been objected.

Non-Final Rejection

Claim Rejections - 35 USC § 112

Claim 17 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for aliphatic, cycloaliphatic or aromatic polyisocyanates, such as HDI, IPDI, TDI, MDI, H12-MDI, and etc, does not reasonably provide enablement for all the aliphatic, cycloaliphatic or aromatic polyisocyanates in the field of organic chemistry. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to include all the aliphatic, cycloaliphatic or aromatic polyisocyanates unrelated to the invention commensurate in scope with these claims. Furthermore, The instant specification fails

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to provide information that would allow the skilled artisan to practice the instant invention without undue experimentation.

Attention is directed to *In re Wands*, 8 USPQ2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factors to consider when assessing if a disclosure would have required undue experimentation, citing *Ex Parte Forman*, 230 USPQ 546 (BdApl 1986) at 547 the court recited eight factors:

- 1) the quantity of experimentation necessary,
- 2) the amount of direction or guidance provided,
- 3) the presence or absence of working examples,
- 4) the nature of the invention,
- 5) the state of the prior art,
- 6) the relative skill of those in the art,
- 7) the predictability of the art, and
- 8) the breath of the claims.

In the instant case, the claim encompass hundreds of compounds belonged to various aliphatic, cycloaliphatic or aromatic polyisocyanates. However, applicants' specification provide the only 11 particular examples to represent the use of the compounds. Thus, the examples herein have failed to provide sufficient working examples to support the method of using hundreds of the compounds. Therefore, an appropriate correction is required.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17, a phrase "aliphatic, cycloaliphatic or aromatic polyisocyanates" is written. However, this is vague and indefinite. Each chemical term does not specify the corresponding examples in the claim.

A phrase "objects films" is written. However, this is vague and indefinite.

The claim is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Therefore, an appropriate correction is required.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 17-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marchetti et al (EP0812891).

Marchetti et al discloses coating compositions as well as characterization of films formulations (see page 10 ,line 37) based on perfluoropolyethers : a perfluoropolyetheral prepolymer has a polyisocyanic functionality obtainable by reacting a bifunctional in admixture of a mono perfluoropolyether having an hydroxylic termination with a polyisocyanate containing isocyanurate rings defined by NCO/OH equivalent ratio from 2 to 10 (see page 3 ,lines 1-10). Furthermore, the usable bifunctional perfluoropolyethers have a molecular weight number averaging from 700 to 1300 (see page 3 ,lines 29-30). Moreover, in the crossing techniques (hydrohardening

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and bi-component urethane), a catalyst is added at the time of the urethanic crosslinking (see page 5 ,lines 52-53).

However, Marchetti et al differs from the instant invention that the crosslinking oligourethane is not mentioned and the average number of molecular weight of the mono perfluoropolyether having an hydroxylic functionality is also not mentioned.

Concerning the absence of the crosslinking oligourethane, the reference does teach broadly the general use of urethane. The oligourethane is a kind of urethanes belonged to the generic urethane compounds; furthermore, the Marchetti et al does point out that the urethanic crosslinking is the well-known technique in the art of producing coating compositions (see page 5 ,lines 52-53). Therefore, it would have been obvious to the skillful artisan in the art to have motivated to crosslink the oligourethane to Marchetti's et al perfluoropolyetheral prepolymer in the coating compositions as an alternative to the regular urethane because the oligourethane is a kind of urethanes belonged to the generic urethane compounds.

With respect to the failure to mention the average number of molecular weight of the mono perfluoropolyether, the reference is not specified. However, Marchetti et al does disclose that the usable bifunctional perfluoropolyethers have a molecular weight number averaging from 700 to 1300 (see page 3 ,lines 29-30). Therefore, it would have been obvious to the skillful artisan in the art to have motivated to use the average number of molecular weight of the bifunctional perfluoropolyethers as that of mono perfluoropolyether in the Marchetti et al coating compositions because the the average number of molecular weight of bifunctional perfluoropolyethers may be used as a guide

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for limiting the average numbers of molecular weight of the mono perfluoropolyether in the Marchetti's et al coating compositions .

Marchetti et al expressly discloses coating compositions based on perfluoropolyethers : a polyisocyanic functionality obtainable by reacting a bifunctional in admixture of a mono perfluoropolyether having an hydroxylic termination ; in addition, the urethanic crosslinking is the well-known technique in the art of producing coating compositions (see page 5 ,lines 52-53). Therefore, it would have been obvious to the skillful artisan in the art to have motivated to crosslink the urethane to Marchetti's et al perfluoropolyethereal prepolymer in the coating compositions because the urethanic crosslinking is the well-known technique in the art of producing coating compositions .

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communications from the examiner should be directed to T. Victor Oh whose telephone number is (703)305-0809. The examiner can be normally reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Alan Rotman, can be reached on (703) 308-4698. The fax number for the organization where this application or proceeding is assigned is (703)308-2742.


4/6/13


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